

JUE FAN

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[LinkedIn](#) ◊ [Website](#)

EDUCATION

PhD in Computer Science

Jan 2025 – Jan 2029*

National University of Singapore

Singapore

- Supervised by **Dr. Bryan Kian Hsiang Low** and **Dr. Nancy F. Chen**
- GPA: 5.00/5.00
- Holder of **A*STAR Graduate Scholarship (Computing)**

Bachelor of Science & Bachelor of Computing

Aug 2020 – Dec 2024

National University of Singapore

Singapore

- Double Degree Program in **Applied Mathematics** (Honours) and **Computer Science** (Honours)
- GPA: 4.72/5.00 (Applied Mathematics); 4.68/5.00 (Computer Science)
- Turing Programme
- CS specialisations in Algorithms & Theory (Distinction), Artificial Intelligence (Distinction)
- DDP specialisation in Algorithms and Computation
- Holder of **Science & Technology Undergraduate Merit Scholarship**
- Dean's List, Bachelor of Science (AY21/22 Semester 2)
- Dean's List, Bachelor of Science (AY24/25 Semester 1)

Exchange Program

Aug 2023 – Jan 2024

École Polytechnique Fédérale de Lausanne

Switzerland

RESEARCH INTERESTS AND PUBLICATIONS

Interested Areas

- Multi-agent Machine Learning: collaborative machine learning, federated learning, trusted data sharing.
- Data-centric Machine Learning: data valuation, data selection.

Publications

- [1] Xiao Tian[†], **Jue Fan**^{†*}, Rachael Hwee Ling Sim, Zixuan Wang, Bryan Kian Hsiang Low. “[Is Data Shapley Not Better than Random in Data Selection? Ask NASH](#)” (**Spotlight**). In: *Proceedings of the 43rd International Conference on Machine Learning (ICML-26)*, Seoul, South Korea, accepted in May 2026. Acceptance rate: 2.2%.
- [2] Rachael Hwee Ling Sim[†], **Jue Fan**[†], Xiao Tian, Xinyi Xu, Patrick Jaillet, Bryan Kian Hsiang Low. “[Incentivizing Truthfulness and Collaborative Fairness in Bayesian Learning](#)” (**Oral**). In: *Proceedings of the 43rd International Conference on Machine Learning (ICML-26)*, Seoul, South Korea, accepted in May 2026. Acceptance rate: 0.7%.
- [3] Xiao Tian, **Jue Fan**, Rachael Hwee Ling Sim, Bryan Kian Hsiang Low. “[INO-SGD: Addressing Utility Imbalance under Individualized Differential Privacy](#)”. In: *Proceedings of the 14th International Conference on Learning Representations (ICLR-26)*, Rio de Janeiro, Brazil, accepted in Jan 2026. Acceptance rate: 28%.
- [4] Rachael Hwee Ling Sim, **Jue Fan**, Xiao Tian, Bryan Kian Hsiang Low, Patrick Jaillet. “[Deletion-Anticipative Data Selection With a Limited Budget](#)”. In: *Proceedings of the 41st International Conference on Machine Learning (ICML-24)*, Vienna, Austria, accepted in May 2024. Acceptance rate: 27.50%.

*This is the expected date of graduation.

[†] denotes equal contribution.

- [5] Xiao Tian, Rachael Hwee Ling Sim, **Jue Fan**, Bryan Kian Hsiang Low. “[DeRDaVa: Deletion-Robust Data Valuation for Machine Learning](#)”. In: *Proceedings of the 38th Association for the Advancement of Artificial Intelligence (AAAI-24)*, Vancouver, Canada, accepted in Dec 2023. Acceptance rate: 23.75%.

PROFESSIONAL AND INDUSTRIAL EXPERIENCES

Student Researcher

May 2024 – Dec 2024

National University of Singapore

Singapore

- Conducted research on fair data valuation, truthfulness incentives, and collaborative machine learning.

Undergraduate Researcher

Aug 2022 – Sep 2023

National University of Singapore

Singapore

- Involved in the Undergraduate Research Opportunity Programme (UROP).
- Conducted research on active learning, machine unlearning, and submodular optimization under the supervision of Associate Low Professor Bryan Kian Hsiang.

Undergraduate Teaching Assistant

Jan 2022 – May 2023

National University of Singapore

Singapore

- Conducted weekly tutorial and laboratory sessions; developed course materials (e.g., slides, assignments, examinations); mentored group projects; reviewed and marked codes, assignments and examinations.
- Taught the following courses (with final teaching ratings obtained from students):

Course	Obtained Rating	Faculty Average Rating
<i>Programming Methodology II</i>	4.6/5.0	4.2/5.0
<i>Machine Learning</i>	4.5/5.0	4.2/5.0

Technical Project Coordinator / Platform Development Intern

May 2022 – August 2022

Singapore Telecommunication Limited (Singtel)

Singapore

- Built Restful APIs and microservices using Apache Camel Spring Boot framework.
- Conducted research and comparative analysis on different phases in tech refresh with emphasis on heterogeneous database migration.
- Conducted market analysis on VR/AR and designed promotion strategies for 5G in an internal Hackathon.
- Facilitated the cleanup of the internal repository for 100+ Apps.

Education Creator & Strategist Intern

Oct 2021 – Jan 2022

Learnseeker

Remote

- Managed the classification and curation of education resources for Secondary School and Primary School students.
- Created resources and contents for Learnseeker, an AI data visualization and automatic grading tool for educators.

ADDITIONAL INFORMATION

Languages

English (Proficient), Mandarin (Native), French (Adequate)

IT Skillsets

Programming languages (e.g., Python, Java, JavaScript), machine learning and statistics libraries (e.g., Scikit-Learn, TensorFlow, Keras, PyTorch)